

Komiya

Conversion of Examples—Revised

70	B	C	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
71	wt%	MW	5	6	7	8	9	10	11	12	15	16	17	18	19	20
72																
73	nd		1.56697	1.56879	1.58242	1.54874	1.57211	1.57484	1.57474	1.55275	1.57944	1.57467	1.54122	1.58590	1.54708	1.57274
74	vd		73.3	71.5	70.0	71.6	70.1	70.2	70.7	71.6	69.1	69.0	74.9	69.3	74.1	71.5
75	P ₂ O ₅	141.945	24.20	16.14	16.14	18.52	20.17	20.17	20.17	18.82	16.14	24.20	21.50	24.20	20.70	19.36
76	Al ₂ O ₃	101.961	5.80	3.86	3.86	3.28	4.83	4.83	4.83	3.40	3.86	5.80	3.28	5.80	3.59	4.64
77	BaO	163.326				5.19										
78	SrO	103.619								3.38						
79	CaO	56.077													2.26	
80	MgO	40.304											2.21			
81	BaF ₂	175.324	45.00	40.00	35.00	22.00	35.00	37.00	33.00	25.60	60.00	60.00	22.00	35.00	25.75	41.00
82	SrF ₂	125.617	20.00	20.00	20.00	13.00	25.00	23.00	27.00	14.40	5.00	5.00	13.00	20.00	14.37	20.00
83	CaF ₂	78.075				15.00				12.00			15.00		11.98	
84	MgF ₂	62.302				8.00				6.40			8.00		6.39	
85	AlF ₃	83.977			5.00											
86	GdF ₃	214.245		5.00						1.00						
87	Gd ₂ O ₃	362.498	5.00	15.00	20.00	16.00	5.00	10.00	5.00	15.00	15.00	5.00	15.00	15.00	14.97	8.00
88	La ₂ O ₃	325.809						5.00								2.00
89	Y ₂ O ₃	225.810							10.00							2.00
90	Yb ₂ O ₃	394.078														3.00
91	total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
92	F	18.998	15.80	16.05	17.03	20.88	15.15	14.98	15.32	19.91	14.52	14.52	20.88	13.63	19.65	14.94
93	MgF ₂ +CaF ₂ +SrF ₂ +BaF ₂		65.00	60.00	55.00	58.00	60.00	60.00	60.00	58.40	65.00	65.00	58.00	55.00	58.48	61.00
94	Y ₂ O ₃ +La ₂ O ₃ +Gd ₂ O ₃ +Yb ₂ O ₃		5.00	15.00	20.00	15.00	15.00	15.00	15.00	15.00	15.00	5.00	15.00	15.00	14.97	15.00

Компьютер

25	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
26	mol		5	5	6	7	8	9	10	11	12	15	16	17	18	19	20
27		MW		1.56637	1.56879	1.56242	1.54874	1.57211	1.57474	1.57474	1.55275	1.57944	1.57467	1.54122	1.58550	1.54708	1.57274
28	nd			73.3	71.5	70.0	71.6	70.1	70.2	70.7	71.3	69.1	69.0	74.9	69.3	74.1	71.5
29	vd			0.1137	0.0758	0.0758	0.0644	0.0947	0.0947	0.0947	0.0667	0.0758	0.1137	0.0644	0.1137	0.0705	0.0909
30	AlPO ₃	263.897	=E8/\$C30				0.0339										
31	BaPO ₃	295.271									0.0326					0.0404	
32	SrPO ₃	245.564												0.0549			
33	CaPO ₃	198.022												0.1255	0.1996	0.1472	0.2339
34	MgPO ₃	182.249									0.1460	0.3422	0.3422	0.1255	0.1996	0.1472	0.2339
35	BaF ₂	175.324	=E13/\$C35	0.2667	0.2281	0.1996	0.1255	0.1996	0.2110	0.1882	0.1460	0.3422	0.3422	0.1255	0.1996	0.1472	0.2339
36	SrF ₂	126.617	=E14/\$C36	0.1592	0.1592	0.1592	0.1035	0.1990	0.1831	0.2149	0.1146	0.0398	0.0398	0.1035	0.1592	0.1146	0.1592
37	CaF ₂	78.075					0.1921				0.1537			0.1921		0.1537	
38	MgF ₂	62.302					0.1284				0.1027			0.1284		0.1027	
39	AlF ₃	83.977				0.0595											
40	GdF ₃	214.245		0.0233							0.0047						
41	Gd ₂ O ₃	362.498	=E19/\$C41	0.0138	0.0414	0.0552	0.0414	0.0138	0.0276	0.0138	0.0414	0.0414	0.0138	0.0414	0.0414	0.0414	0.0221
42	La ₂ O ₃	325.803							0.0153								0.0061
43	Y ₂ O ₃	225.810								0.0443							0.0089
44	Yb ₂ O ₃	394.078						0.0254									0.0076
45	total		=SUM(E30:E44)	0.5	0.5	0.5	0.7	0.5	0.5	0.6	0.7	0.5	0.5	0.7	0.5	0.7	0.5
46	F	18.9984	=(E35+E36+E37+E38)*2+(E39+E40)*3	0.8318	0.8447	0.8963	1.099	0.7973	0.7883	0.8063	1.0482	0.7641	0.7641	1.059	0.7177	1.0364	0.7861
47	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
48	proportional divisions by weight																
49	MW		5	5	6	7	8	9	10	11	12	15	16	17	18	19	20
50	nd			1.56637	1.56879	1.56242	1.54874	1.57211	1.57474	1.57474	1.55275	1.57944	1.57467	1.54122	1.58550	1.54708	1.57274
51	vd			73.3	71.5	70.0	71.6	70.1	70.2	70.7	71.3	69.1	69.0	74.9	69.3	74.1	71.5
52	P ₂ O ₅	141.946	=(E30*3/2)+E31+E32+E33+E34)*\$C52	24.20	16.14	16.14	18.52	20.17	20.17	20.17	18.82	16.14	24.20	21.50	24.20	20.74	19.36
53	Al ₂ O ₃	101.961	=(E30/2)*\$C53	5.80	3.86	3.86	3.28	4.83	4.83	4.83	3.40	3.86	5.80	3.28	5.80	3.59	4.64
54	BaO	153.328					5.19										
55	SrO	103.619									3.38						
56	CaO	66.077														2.27	
57	MgO	40.304												2.21			
58	BaF ₂	175.324	=E35*\$C58	45.00	40.00	36.00	22.00	36.00	37.00	33.00	25.00	60.00	60.00	22.00	35.00	25.80	41.00
59	SrF ₂	125.617	=E36*\$C59	20.00	20.00	20.00	13.00	25.00	23.00	27.00	14.40	5.00	5.00	13.00	20.00	14.40	20.00
60	CaF ₂	78.075					16.00				12.00			15.00		12.00	
61	MgF ₂	62.302					8.00				6.40			8.00		6.40	
62	AlF ₃	83.977				5.00					1.00						
63	GdF ₃	214.245		5.00													
64	Gd ₂ O ₃	362.498	=E41*\$C64	5.00	16.00	20.00	15.00	5.00	10.00	5.00	15.00	15.00	5.00	15.00	15.00	15.00	8.00
65	La ₂ O ₃	325.809							5.00								2.00
66	Y ₂ O ₃	225.810								10.00							2.00
67	Yb ₂ O ₃	394.078						10.00									3.00
68	total		=SUM(E52:E67)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.2	100.0
69	F	18.9984	=E46*\$C69	15.802	15.049	17.028	20.879	15.147	14.976	15.319	19.913	14.516	14.516	20.879	13.635	19.691	14.935
70	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
47																	
48			proportional divisions by weight														
49		MW	5														
50	nd			1.5637	1.56379	1.69242	1.54874	1.57211	1.57484	1.57474	1.56275	1.57944	1.57467	1.54122	1.58590	1.54708	1.57274
51	vd			73.3	71.6	70.0	71.6	70.1	70.2	70.7	71.6	69.1	69.0	74.9	68.3	74.1	71.6
52	P ₂ O ₅	141.945	= (E30*3/2)+E31+E32+E33+E34*SC52	24.20	16.14	16.14	16.14	18.62	20.17	20.17	18.82	16.14	24.20	21.60	24.20	20.74	19.36
53	Al ₂ O ₃	101.961	= (E30/2)*SC53	6.80	3.86	3.86	3.28	4.83	4.83	4.83	3.40	3.86	5.80	3.28	5.80	3.69	4.54
54	BaO	163.326															
55	SiO	103.618															
56	CaO	66.077															
57	MgO	40.804															
58	BaF ₂	176.324	=E35*SC38	45.00	40.00	35.00	22.00	35.00	37.00	33.00	26.00	60.00	60.00	22.00	35.00	26.80	41.00
59	SrF ₂	126.817	=E36*SC39	20.00	20.00	20.00	13.00	25.00	23.00	27.00	14.40	5.00	5.00	13.00	20.00	14.40	20.00
60	CaF ₂	78.076					15.00				12.00			15.00			
61	MgF ₂	62.302				5.00	8.00				6.40			8.00		6.40	
62	AlF ₃	83.977															
63	CaF ₃	214.246									1.00						
64	CaO ₂	362.498	=E41*SC64	5.00	15.00	20.00	15.00	5.00	10.00	5.00	15.00	16.00	5.00	15.00	15.00	16.00	8.00
65	La ₂ O ₃	326.808							5.00								2.00
66	Y ₂ O ₃	226.810								10.00							2.00
67	Yb ₂ O ₃	394.078						10.00									3.00
68	total		=SUM(E62:E67)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.2	100.0
69	F	18.9984	=E46*SC69	15.802	16.049	17.028	20.870	16.147	14.976	16.319	15.913	14.516	14.516	20.879	13.636	19.691	14.935
70	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
71	wt%																
72	MW	5															
73	nd			1.6637	1.56379	1.59242	1.54874	1.57211	1.57484	1.57474	1.55775	1.57944	1.57467	1.54122	1.58590	1.54708	1.57274
74	vd			73.3	71.6	70.0	71.6	70.1	70.2	70.7	71.6	69.1	69.0	74.9	68.3	74.1	71.6
75	P ₂ O ₅	141.945	=E52/E\$68*100	24.20	16.14	16.14	16.14	18.62	20.17	20.17	18.82	16.14	24.20	21.60	24.20	20.70	19.36
76	Al ₂ O ₃	101.961	=E53/E\$68*100	6.80	3.86	3.86	3.28	4.83	4.83	4.83	3.40	3.86	5.80	3.28	5.80	3.69	4.54
77	BaO	163.326					6.19				3.88						
78	SrO	103.518														2.26	
79	CaO	66.077												2.21			
80	MgO	40.804															
81	BaF ₂	176.324	=E58/E\$68*100	45.00	40.00	35.00	22.00	35.00	37.00	33.00	26.00	60.00	60.00	22.00	35.00	26.76	41.00
82	SrF ₂	126.817	=E59/E\$68*100	20.00	20.00	20.00	13.00	25.00	23.00	27.00	14.40	5.00	5.00	13.00	20.00	14.87	20.00
83	CaF ₂	78.076					15.00				12.00			15.00		11.98	
84	MgF ₂	62.302					8.00				6.40			8.00		6.39	
85	AlF ₃	83.977				5.00											
86	CaF ₃	214.246									1.00						
87	CaO ₂	362.498	=E64/E\$68*100	5.00	15.00	20.00	15.00	5.00	10.00	5.00	15.00	16.00	5.00	15.00	15.00	14.97	8.00
88	La ₂ O ₃	326.809							5.00							2.00	
89	Y ₂ O ₃	226.810								10.00							3.00
90	Yb ₂ O ₃	394.078						10.00									
91	total		=SUM(E75:E90)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
92	F	18.998	=E69/E\$68*100	16.80	16.05	17.03	20.88	15.15	14.98	15.32	13.91	14.62	14.62	20.88	13.63	19.65	14.94
93	AlF ₃ +CaF ₂ +SrF ₂ +BaF ₂			65.00	60.00	55.00	68.00	60.00	60.00	60.00	60.00	58.40	65.00	65.00	58.00	55.00	61.00
94	Y ₂ O ₃ +La ₂ O ₃ +Yb ₂ O ₃			5.00	16.00	20.00	15.00	16.00	15.00	15.00	15.00	15.00	15.00	6.00	15.00	14.97	15.00